

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-34. (Canceled)

35. (Currently Amended) An apparatus for dispensing materials to vegetation, the apparatus comprising:

a conduit having a channel;

an outlet coupled to the channel for conveying a substance from the channel to the vegetation;

a plurality of sensors fixedly coupled to the conduit, wherein signals from the sensors are used to control conveyance of the substance to the plants; and

a sensor cable secured ~~running~~ along a length of the conduit and electrically coupled to the sensors for transferring the signals to a destination.

36. (Original) The apparatus of claim 35, wherein one or more sensors is associated with a particular outlet, the apparatus further comprising

a flow control coupled to the particular outlet for regulating an amount of the substance conveyed to the vegetation; and

a control system coupled to the flow control and to the one or more sensors associated with the particular outlet, for sending a signal to regulate an amount of the substance conveyed to the vegetation in response to a signal from the one or more sensors.

37. (Original) The apparatus of claim 36, wherein the control system includes a microprocessor.

38. (Original) The apparatus of claim 35, wherein the sensor includes an optical sensor.

39. (Original) The apparatus of claim 38, wherein the sensor includes a photodetector.

40. (Original) The apparatus of claim 35, wherein the sensor includes a humidity sensor.

41. (Original) The apparatus of claim 35, wherein the sensor includes a leaf wetness sensor.

42. (Original) The apparatus of claim 35, wherein the sensor includes a temperature sensor.

43. (Original) The apparatus of claim 35, wherein the sensor includes an insect sensor.

44. (Original) The apparatus of claim 43, wherein the sensor includes a protein sensor.

45. (Original) The apparatus of claim 43, wherein the sensor includes a DNA sensor.

46. (Original) The apparatus of claim 43, wherein the sensor includes a sticky trap.

47. (Original) The apparatus of claim 43, wherein the sensor includes a pheromone detector.

48. (Original) The apparatus of claim 35, wherein the sensor includes a temperature sensor.

49. (Original) The apparatus of claim 35, wherein the sensor includes an infrared sensor.

50. (Original) The apparatus of claim 35, wherein the sensor includes a sugar accumulation sensor.

51. (Original) The apparatus of claim 35, wherein the sensor includes a pH probe.

52. (Original) The apparatus of claim 35, wherein the sensor includes a soluble solids sensor.

53. (Original) The apparatus of claim 35, wherein the sensor includes a sugar accumulation sensor.

54 - 76. (Canceled)

77. (Previously Presented) The method of claim 79 further comprising:  
placing the conduit in proximity to regularly spaced plants so that a regular spacing of the sensors is in substantial alignment with the plants' regular spacing.

78. (Previously Presented) The method of claim 77, wherein the plants include grape vines.

79. (Previously Presented) The method of claim 35, wherein a group of the plurality of sensors is spaced at regular intervals.

80. (Previously Presented) The method of claim 35, wherein a group includes one or more plants.

81. (Original) The method of claim 35, wherein the destination is a central control center for controlling dispensing of the material in response to signals from two or more sensors.

82. (Original) An apparatus for dispensing materials to vegetation, the apparatus comprising:

a conduit having a channel;

an outlet coupled to the channel for conveying a substance from the channel to the vegetation;

a plurality of sensors fixedly coupled to the conduit, wherein each sensor includes a wireless transmitter for transmitting a signal to a central controller for controlling dispensing of a material via the outlet in response to the transmitted signals.